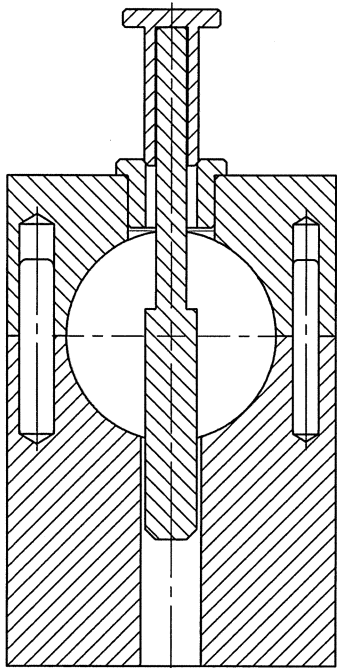
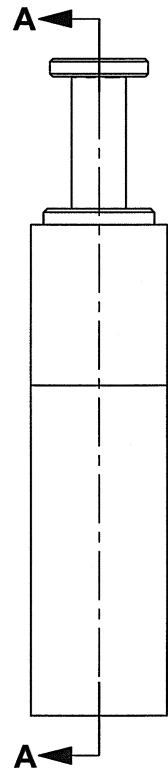
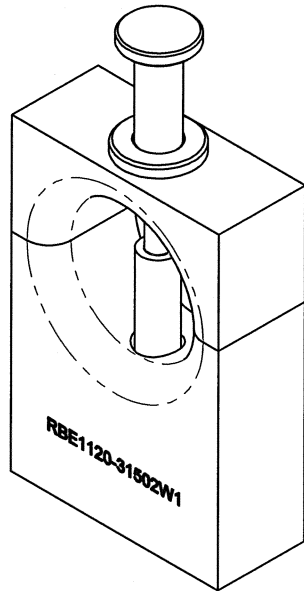
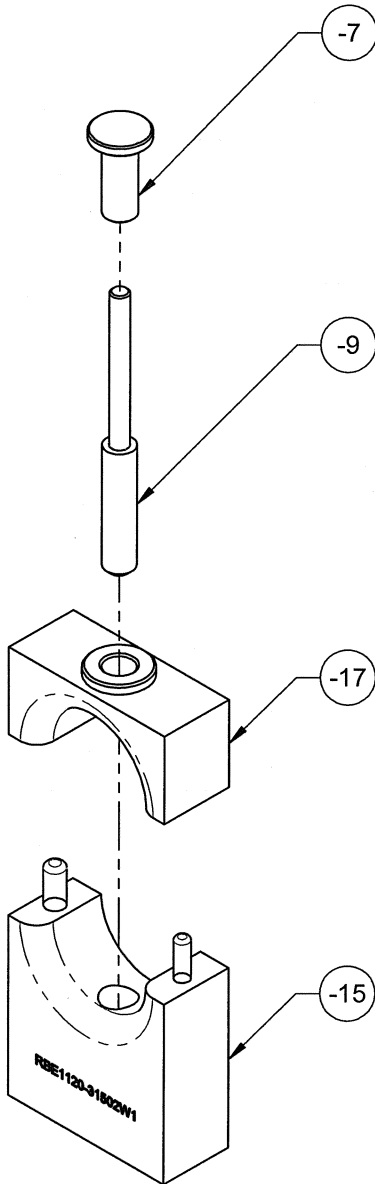


ITEM #	QTY	PART #	PART TITLE
-7	1	RBE1120-31502W1-7	BUSHING #2
-9	1	RBE1120-31502W1-9	PIN
-15	1	RBE1120-31502W1-15	BASE ASSEMBLY
-17	1	RBE1120-31502W1-17	TOP ASSEMBLY



SECTION A-A



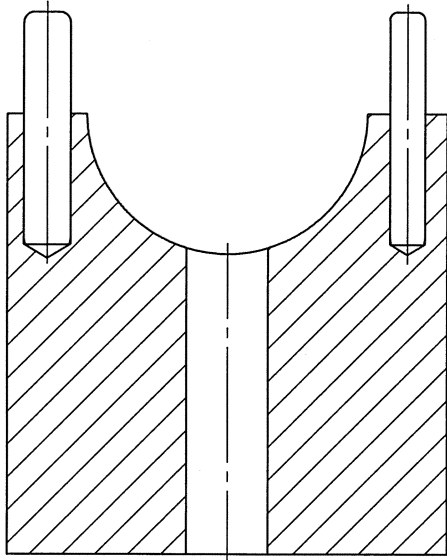
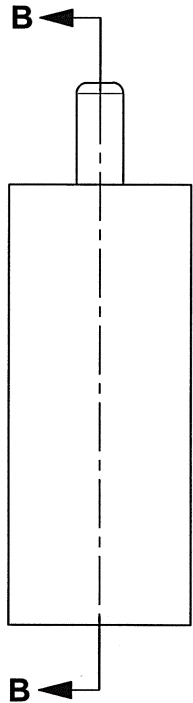
RBE1120-31502W1 PUSH IN / PRESS OUT DEVICE

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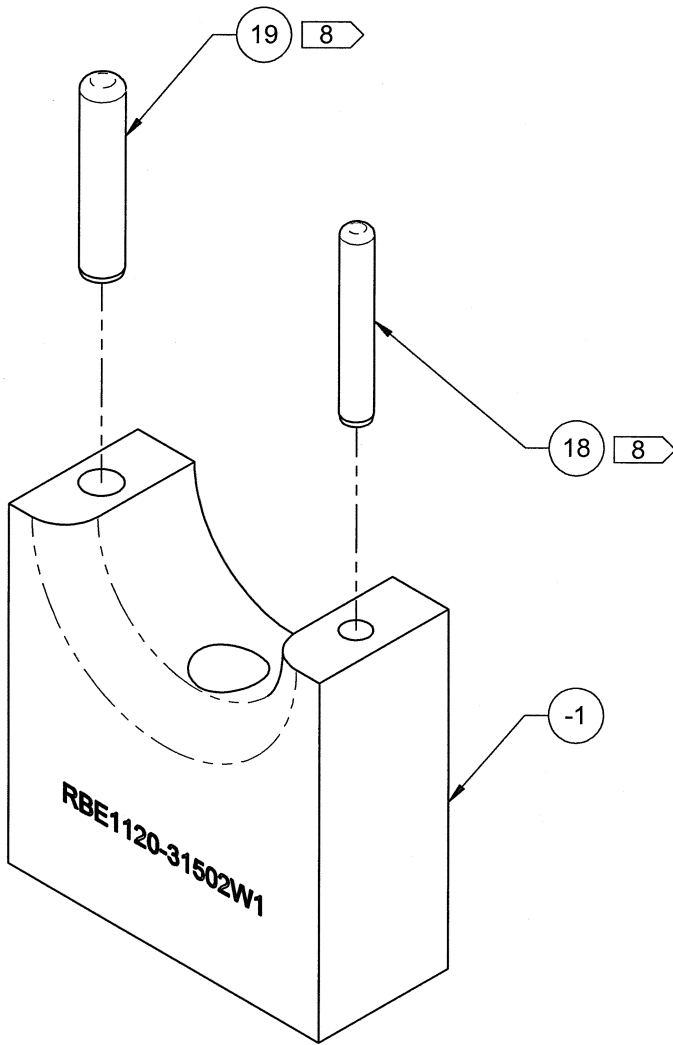
- NOTES:
- 1) MATERIAL: N/A
 - 2) HEAT TREAT: N/A
 - 3) FINISH: N/A
 - 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"
 - 5) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 6) IDENTIFICATION: N/A
 - 7) ASSEMBLE AS SHOWN
 - 8) THE TOOL ASSY MUST BE PACKAGED WITH A DESICCANT BAG INTO A TIGHT FITTING SEALED PLASTIC BAG

B	SEE PREVIOUS REVISION FOR MORE INFORMATION	19-870	KPT
	UPDATED DRAWING TEMPLATE		
	ADDED SUBASSEMBLY ITEMS -15 AND -17		
	ITEM 18 MS16555-344 WAS ITEM -11 MCMASTER-CARR#98381A512 ITEM 19 MS16555-349 WAS ITEM -13 MCMASTER-CARR#98381A544		
	ITEM -15 CONTAINS ITEMS -1, 18, AND 19 ITEM -17 CONTAINS ITEMS -3 AND -5		
	-1 DIM WAS $\phi .2496-.2487$ IS $\phi 0.2500-0.2492$. DIM WAS $\phi .1874-.1868$ IS $\phi 0.1875-0.1867$. DIM WAS $1.800 \pm .001$ IS 1.934 ± 0.001 . DIM WAS $\phi 1.345$ IS $\phi 1.510-1.505$. DIM WAS $3X .237$ IS 2.365 . REMOVED .900, $3X .490$, AND 1.180 DIMS		
	-3 DIM WAS $1.800 \pm .001$ IS 1.934 . DIM WAS $\phi 1.345$ IS $\phi 1.510-1.505$. DIM WAS $\phi .2540-.2519$ IS $\phi 0.258-0.263$. DIM WAS $\phi .6265-.6255$ IS $\phi 0.6257-0.625$. DIM WAS $\phi .1907-0.1890$ IS $\phi 0.201-0.196$. REMOVED .900, $3X .490$, AND 1.180 DIMS		
	-5 DIM WAS .455 IS 0.375. DIM WAS $\phi .6270-.6267$ IS $\phi 0.6266-0.6262$. DIM WAS $\phi .3750+.0005/+ .0001$ IS $\phi 0.376-0.375$. REMOVED (.570) AND .115 DIMS. ADDED 0.49 DIM AND 48-52 RC HEAT TREAT		
	-7 REMOVED ORDINATE DIMENSIONS. ADDED R0.008 MAX, 0.99, AND 1.12 DIMS		
	-9 REMOVED 1.65 DIM. ADDED 2.02 DIM		
REV.	DESCRIPTION	ECN #	BY
DESIGN	KPT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT		
CHECKED	MW	TOOL PART #	REV. B
MFG. APPR.	FK	RBE1120-31502W1	SHEET 1 OF 8
APPROVED		TITLE	SCALE
		PRESS IN / PUSH OUT DEVICE	NTS
DATE	2019-09-09	COPYRIGHT © 2019 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

ITEM #	QTY	PART #	PART TITLE
-1	1	RBE1120-31502W1-1	BASE
18	1	MS16555-344	PHOSPHATE COATED STEEL DOWEL PIN 3/16" DIA. X 1-1/4" LG.
19	1	MS16555-349	PHOSPHATE COATED STEEL DOWEL PIN 1/4" DIA. X 1-1/4" LG.



SECTION B-B



RBE1120-31502W1-15 BASE ASSEMBLY

NOTES:
1) MATERIAL: N/A
2) HEAT TREAT: N/A
3) FINISH: N/A
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"
5) UNITS: INCHES UNLESS OTHERWISE NOTED
6) IDENTIFICATION: N/A
7) ASSEMBLE AS SHOWN
8) APPLY RETAINING COMPOUND LOCTITE 620 OR EQUIVALENT ON MATING SURFACES
THEN PRESS FIT ITEMS 18 AND 19 WITH ITEM -1, AND REMOVE EXCESS

DESIGN	KPT	DART AEROSPACE LTD	
DRAWN	KPT	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MW	TOOL PART #	REV. B
MFG. APPR.	FK	RBE1120-31502W1	SHEET 2 OF 8
APPROVED		TITLE	SCALE
		PRESS IN / PUSH OUT DEVICE	NTS
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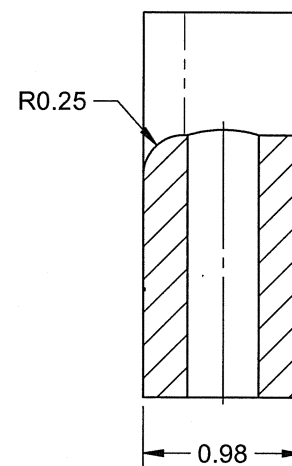
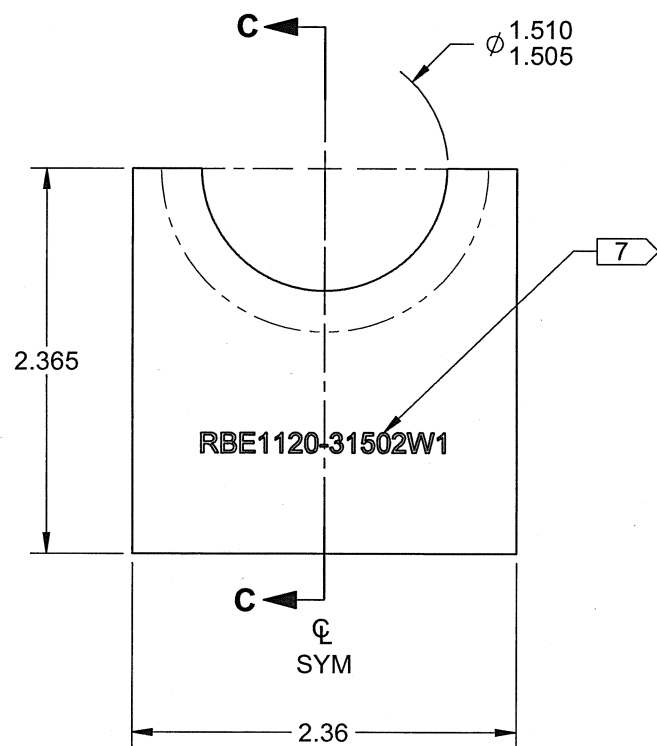
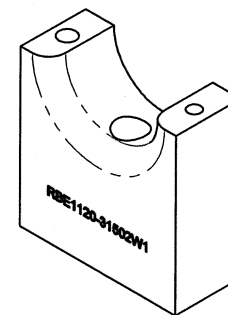
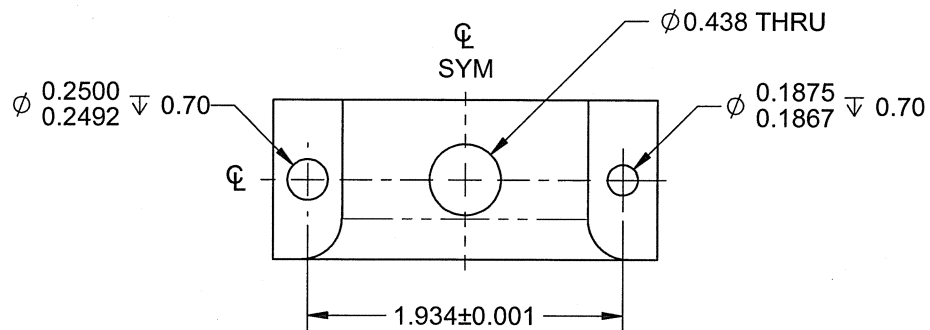
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SECTION C-C

RBE1120-31502W1-1 BASE

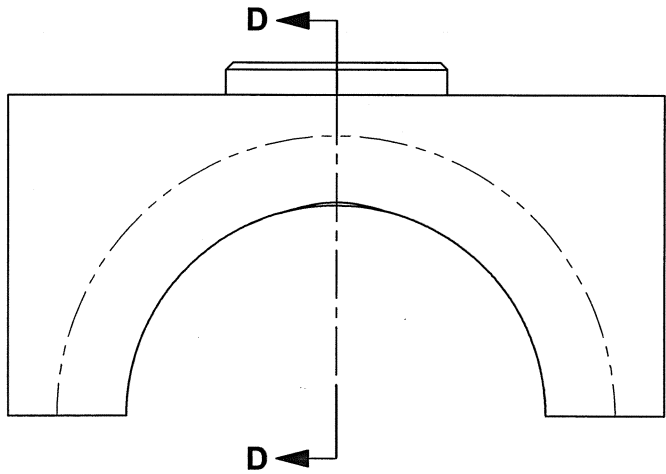
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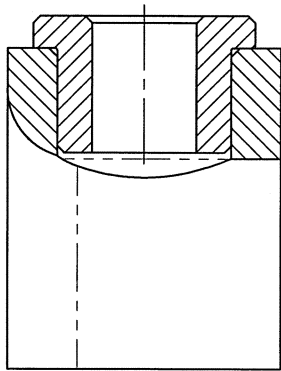
- 1) MATERIAL: A36/1018/1020/1025 HR
- 2) HEAT TREAT: N/A
- 3) FINISH: ZINC PLATE (YELLOW OR BLACK) PER ASTM B633 TYPE 2 CLASS 2
- 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: MACHINE ENGRAVE OR DOT MARK T/N, "RBE1120-31502W1", AS SHOWN
- 8) DIMENSIONS MUST BE MET AFTER PLATING

DESIGN	KPT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT		
CHECKED	MW	TOOL PART # RBE1120-31502W1	REV. B
MFG. APPR.	FK		SHEET 3 OF 8
APPROVED		TITLE PRESS IN / PUSH OUT DEVICE	SCALE NTS
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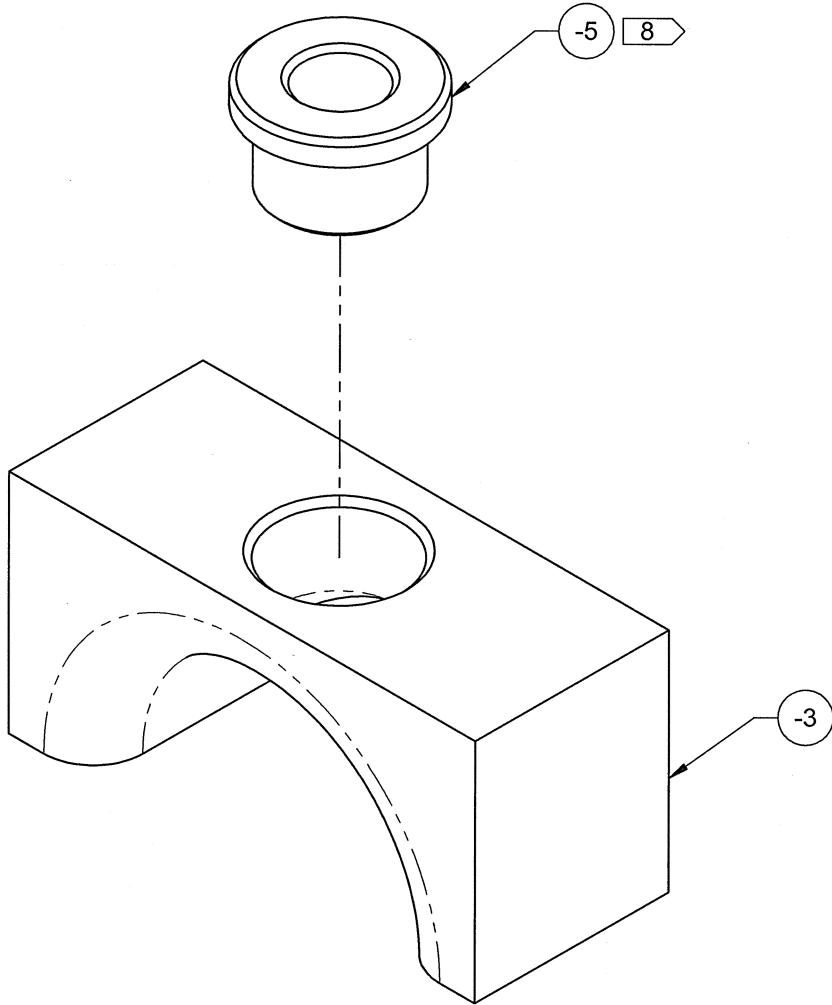
ITEM #	QTY	PART #	PART TITLE
-3	1	RBE1120-31502W1-3	TOP
-5	1	RBE1120-31502W1-5	BUSHING #1




RBE1120-31502W1-17 TOP ASSEMBLY



SECTION D-D



- NOTES:
- 1) MATERIAL: N/A
 - 2) HEAT TREAT: N/A
 - 3) FINISH: N/A
 - 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"
 - 5) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 6) IDENTIFICATION: N/A
 - 7) ASSEMBLE AS SHOWN
 - 8) APPLY RETAINING COMPOUND LOCTITE 620 OR EQUIVALENT ON MATING SURFACES
THEN PRESS FIT ITEM -5 WITH ITEM -3, AND REMOVE EXCESS

DESIGN	KPT	DART AEROSPACE LTD	
DRAWN	KPT	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MW	TOOL PART #	REV. B
MFG. APPR.	FK	RBE1120-31502W1	SHEET 4 OF 8
APPROVED		TITLE	SCALE
		PRESS IN / PUSH OUT DEVICE	NTS 
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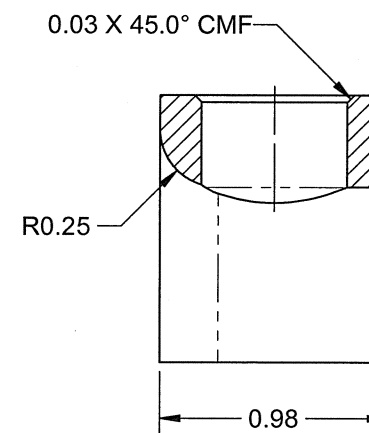
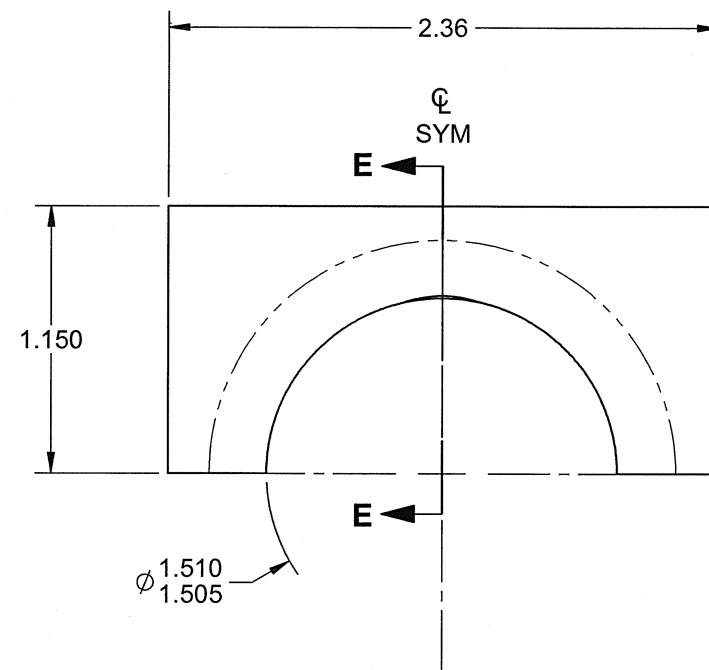
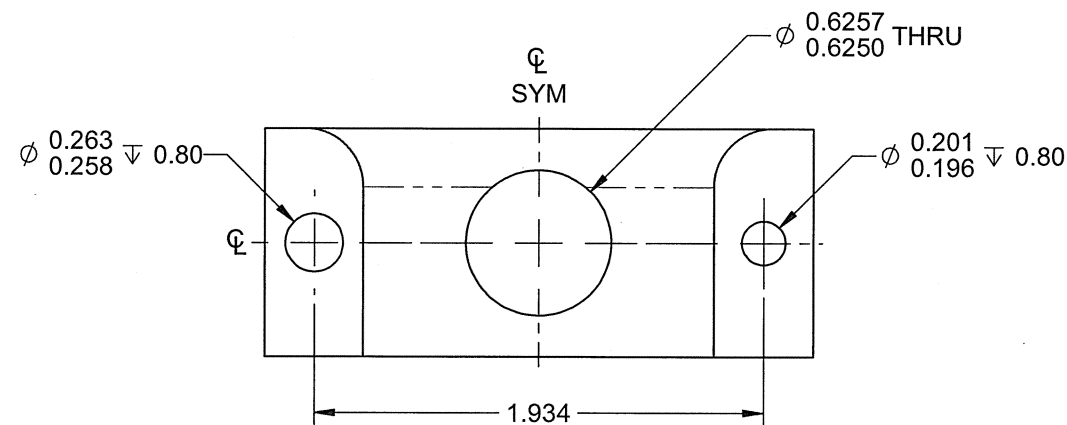
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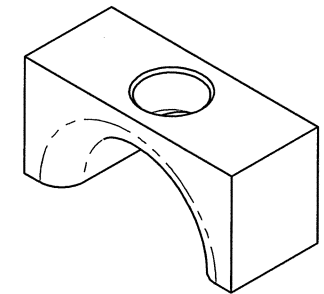
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**SECTION E-E****RBE1120-31502W1-3 TOP**

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NOTES:

- 1) MATERIAL: A36/1018/1020/1025 HR
- 2) HEAT TREAT: N/A
- 3) FINISH: ZINC PLATE (YELLOW OR BLACK) PER ASTM B633 TYPE 2 CLASS 2
- 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: N/A
- 8) DIMENSIONS MUST BE MET AFTER PLATING




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DESIGN	KPT	DART AEROSPACE LTD	
DRAWN	KPT	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MW	TOOL PART #	REV. B
MFG. APPR.	FK	RBE1120-31502W1	SHEET 5 OF 8
APPROVED		TITLE	SCALE
		PRESS IN / PUSH OUT DEVICE	NTS 
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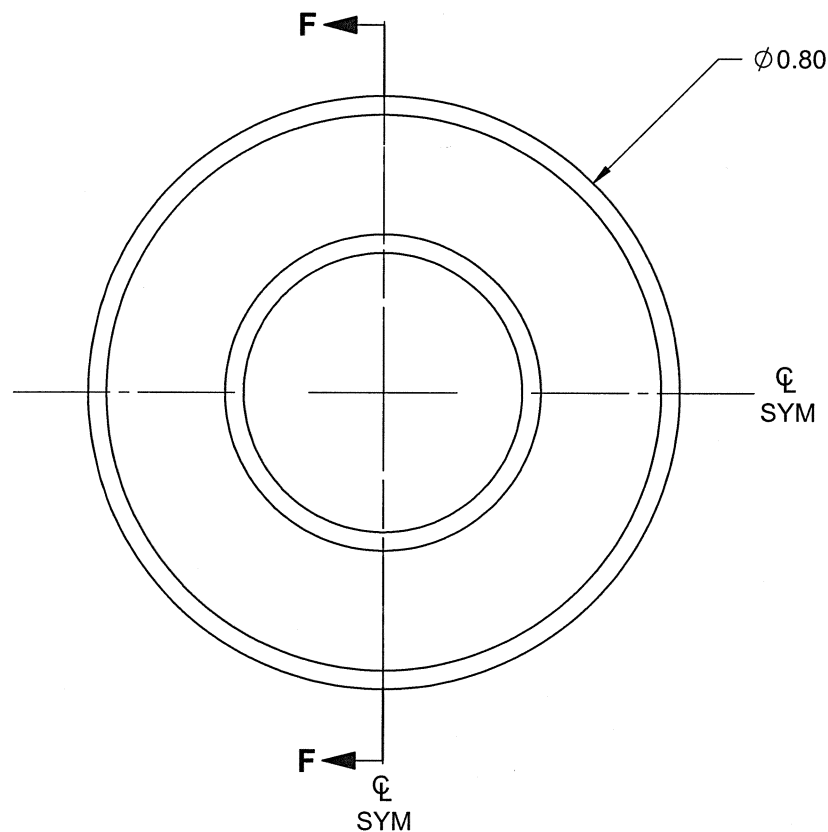
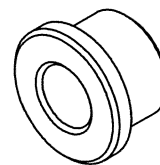
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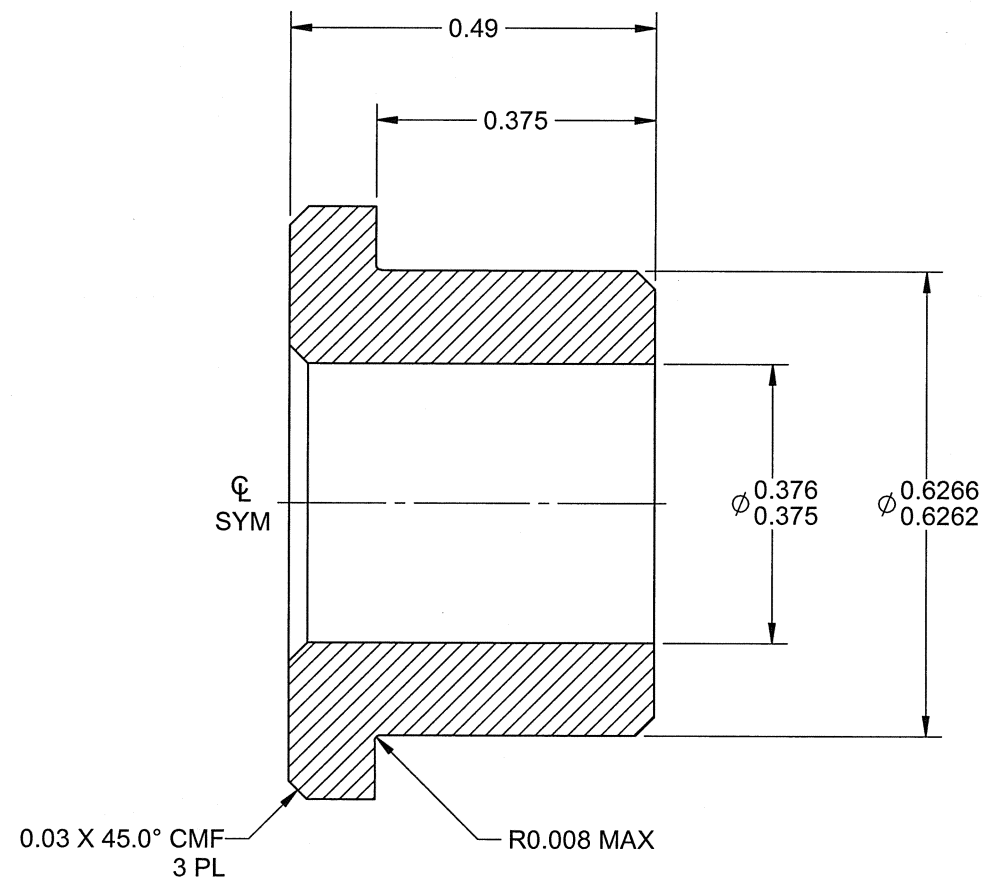
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RBE1120-31502W1-5 BUSHING #1



SECTION F-F

NOTES:

- 1) MATERIAL: O1
- 2) HEAT TREAT: 48-52 RC
- 3) FINISH: BLACK OXIDE PER MIL-C-13924 CLASS 1 THEN APPLY A THIN LAYER OF OIL / CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL-C-81309 TYPE III OR MIL-C-23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS
- 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: N/A

DESIGN	KPT	DART AEROSPACE LTD	
DRAWN	KPT	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MW	TOOL PART #	REV. B
MFG. APPR.	FK	RBE1120-31502W1	SHEET 6 OF 8
APPROVED		TITLE	SCALE
		PRESS IN / PUSH OUT DEVICE	NTS 
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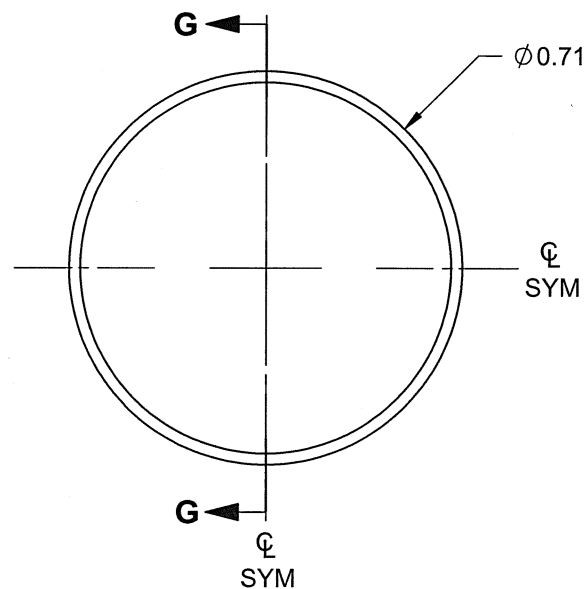
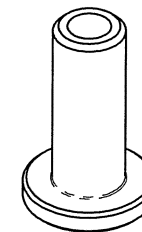
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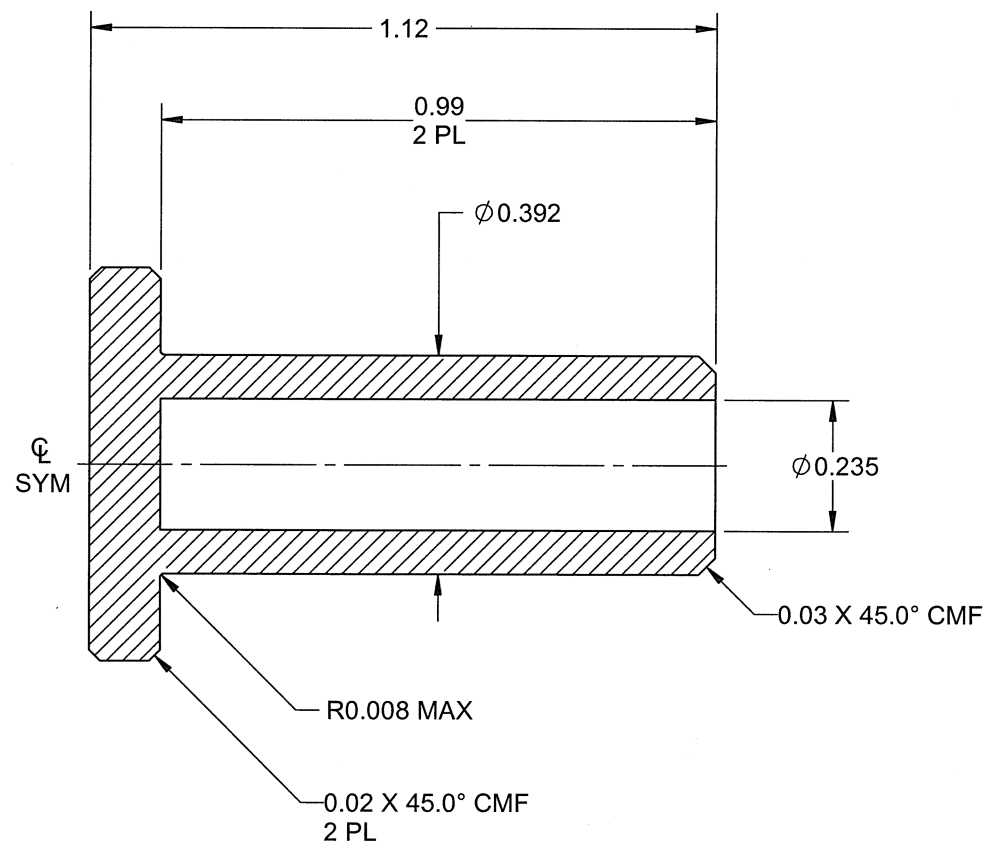
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
RBE1120-31502W1-7 BUSHING #2



SECTION G-G

NOTES:

- 1) MATERIAL: O1
- 2) HEAT TREAT: N/A
- 3) FINISH: BLACK OXIDE PER MIL-C-13924 CLASS 1 THEN APPLY A THIN LAYER OF OIL / CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL-C-81309 TYPE III OR MIL-C-23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS
- 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: N/A

DESIGN	KPT	DART AEROSPACE LTD	
DRAWN	KPT	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MW	TOOL PART #	REV. B
MFG. APPR.	FK	RBE1120-31502W1	SHEET 7 OF 8
APPROVED		TITLE	SCALE
		PRESS IN / PUSH OUT DEVICE	NTS 
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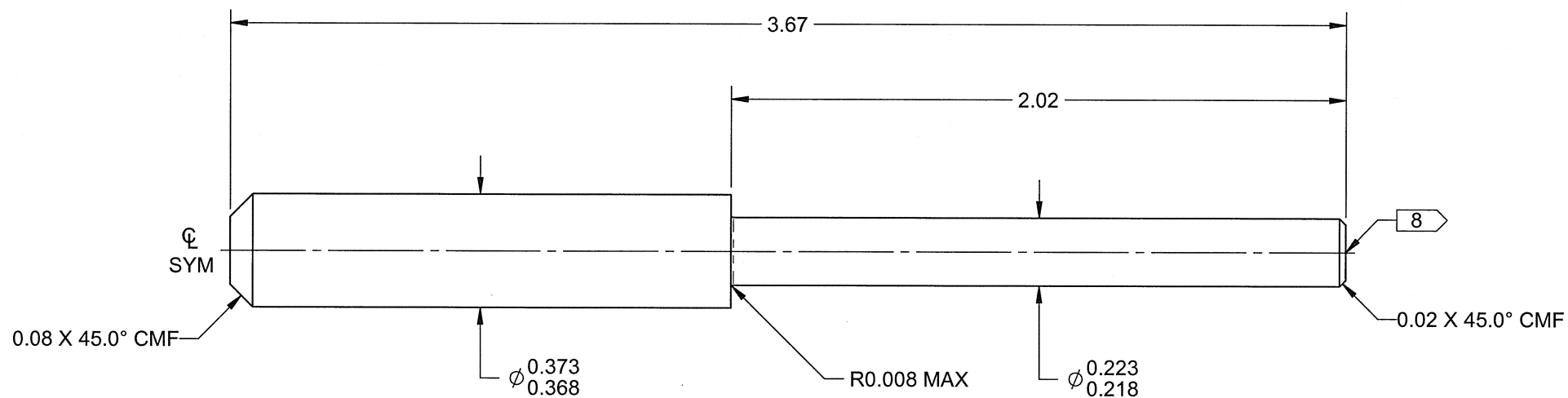
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RBE1120-31502W1-9 PIN

NOTES:

- 1) MATERIAL: O1
- 2) HEAT TREAT: N/A
- 3) FINISH: BLACK OXIDE PER MIL-C-13924 CLASS 1 THEN APPLY A THIN LAYER OF OIL / CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL-C-81309 TYPE III OR MIL-C-23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS
- 4) TOLERANCES: X.X = ± 0.1 " / $\pm 1^\circ$
X.XX = ± 0.01 " / $\pm 0.5^\circ$
X.XXX = ± 0.005 " / $\pm 0.1^\circ$
X.XXXX = ± 0.0005 " / $\pm 0.05^\circ$
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = ± 0.005 "
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: N/A
- 8) CENTER DRILL IS ACCEPTABLE

DESIGN	KPT	DART AEROSPACE LTD		REV. B
DRAWN	KPT	HAWKESBURY, ONTARIO, CANADA		
CHECKED	MW	TOOL PART #	RBE1120-31502W1	SHEET 8 OF 8
MFG. APPR.	FK			
APPROVED		TITLE	SCALE	
		PRESS IN / PUSH OUT DEVICE	NTS	
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